

## **Quarterly Report**

**Agency/Organization:** The Great Basin Institute

**Project Name:** Boulder City Conservation Easement Desert Tortoise Telemetry (Year 1)

**Project Number:** 2013-GBI-1450B

**Reporting Period:** 1 April – 30 June 2015

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**QUESTION 1: What did you accomplish during this reporting period? How did these accomplishments help you reach the goal of your project? If relevant, what indicators or benchmarks were used to determine your progress?**

This quarterly report documents Boulder City Conservation Easement (BCCE) Mojave desert tortoise (*Gopherus agassizii*) telemetry surveys done by the Great Basin Institute (GBI). The Clark County Desert Conservation Program (DCP) and the U.S. Fish and Wildlife Service (FWS) translocated tortoises from the Desert Tortoise Conservation Center to the northeast portion of the BCCE. GBI was contracted by the DCP to conduct telemetry surveys to monitor resident and translocated tortoises in the BCCE. Initial telemetry monitoring began 6 October 2014, following translocation. This document provides information on telemetry surveys conducted for the third quarter of project number 2013-GBI-1450B; 1 April to 30 June, 2015.

Telemetry was conducted on 48 animals, for a total of 548 observations, from a sample of 35 adult translocated tortoises and 13 residents affixed with semi-permanent Transmitters. Data for this project were collected in hardcopy and electronic format. Data were downloaded from each Juno into a Pendragon collection database. Data were then uploaded from Pendragon into an Access correction database where they were verified, examined for errors, and corrected using QA/QC scripts and visual checks.

### Project Goals and Objectives:

- \* Monitor 13 resident and 40 translocated tortoises for 4 years post-translocation
- \* Acquire information regarding home range, settling rates, survival, and habitat use

### Objectives Completed this Quarter:

- \* Radio telemetry monitoring took place 1 April through 25 June 2015
- \* 48 telemetered tortoises were tracked (13 resident and 35 translocated)

**QUESTION 2: What, if any, problems were encountered? Briefly describe those problems and the manner in which they were dealt.**

Telemetry observations were completed for each tortoise at least once per week from March through June 2015. This quarter, four mortalities of translocated tortoises equipped with radio

transmitters were reported, reducing the number of translocated individuals being monitored from 35 to 31. In addition, there are three that cannot be found as of June 25, 2015. Efforts will continue to locate these, and all other animals, in the next quarter.

**QUESTION 3: What, if any, proposed activities were not completed? Briefly describe those activities, the reasons they were not completed and your plans for carrying them out.**

Project activities are on-track at this time.

**QUESTION 4: What is the calculated percent of work completed?**

Project activities began in December 2014. It is estimated that 50% of the project has been completed for year 1 at this time. More progress is expected in the next two quarters, as telemetry monitoring continues.

**QUESTION 5: Do you foresee any upcoming problems with future project activities? If so, how do you propose to overcome those problems?**

No future problems are foreseen for upcoming project activities at this time.

**QUESTION 6: Is there anything else you want to tell the DCP about this project?**

Telemetered tortoises are monitored year-round using a VHF receiver and directional antenna. Location data is collected on each individual at least once monthly November through February, and weekly March through October. As batteries run out, transmitters will be replaced following FWS protocol.

**QUESTION 7: What was produced during the reporting period?**

From 1 April through 25 June 2015, 13 resident and 35 translocated tortoises were monitored in the BCCE (Table 1). Telemetry was conducted over 54 days with 548 observations, with an average of 10.9 observations per day. Individuals were observed eleven to thirteen times over the course of the quarter, with the exception of the three missing (EV4190, EV4185, EV3961) and four deceased individuals (EV3970, EV4009, EV4177, EV4197). A database, biennium progress summary report, and this quarterly progress report have been produced.

Table 1. BCCE observations of tortoises by telemetry from April through June 2015.

Status	Tortoises Transmitted	Radios Removed	Radios Replaced	Tortoises Deceased	Number of Days	Total Observations	Average Observations per Day
Resident	13	0	0	0	46	163	3.5
Translocated	35	4	0	4	52	385	7.4
<b>TOTAL</b>	<b>48</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>54</b>	<b>548</b>	<b>10.9</b>

**Please report on the status of each Milestone and Deliverable, indicate whether they are not started, in progress, or completed and provide comments on the status as necessary**

<b>Date Due</b>	<b>Deliverable/ Milestone #</b>	<b>Deliverable / Milestone Title</b>	<b>Amount Allowed</b>	<b>Status</b>
Dec 2, 2014	M01	Contract Award and Mobilization	No Fee Allowed	Completed
Dec 10, 2014	M02	Project Kick-off Meeting	\$0.00	Completed
Dec 10, 2014	M03	Mobilization and Supply Order	\$5,000.00	Completed
Dec 15, 2014	D01	Data Management Plan	\$5,000.00	Completed
Dec 22, 2014	M04	Begin Telemetry	\$7,000.00	Completed
Dec 31, 2014	D02	Monthly Data Upload	\$9,700.00	Completed
Jan 05, 2015	D03	Quarterly Progress Report (Project Start – Dec 31, 2014)	\$0.00	Completed
Jan 30, 2015	D04	Monthly Data Upload	\$9,700.00	Completed
Feb 27, 2015	D05	Monthly Data Upload	\$9,700.00	Completed
Mar 31, 2015	D06	Monthly Data Upload	\$9,700.00	Completed
Apr 05, 2015	D07	Quarterly Progress Report (Jan 1, 2015 – Mar 31, 2015)	\$0.00	Completed
Apr 30, 2015	D08	Monthly Data Upload	\$9,700.00	Completed
May 29, 2015	D09	Monthly Data Upload	\$9,700.00	Completed
Jun 30, 2015	D10	Monthly Data Upload	\$9,700.00	Completed
Jun 30, 2015	D11	Biennium Progress Summary Report	\$8,500.00	Completed
Jul 05, 2015	D12	Quarterly Progress Report (Apr 1, 2015 – Jun 30, 2015)	\$0.00	Completed
Jul 31, 2015	D13	Monthly Data Upload	\$9,700.00	
Aug 31, 2015	D14	Monthly Data Upload	\$9,700.00	
Aug TBD, 2015	M05	Annual Project Review Presentation (If Requested)	No Fee Allowed	
Sep 30, 2015	D15	Monthly Data Upload	\$9,700.00	
Oct 05, 2015	D16	Quarterly Progress Report (Jul 1, 2015 – Sep 30, 2015)	\$0.00	
Oct 10, 2015	M06	Receipt Submittal (If Necessary)	\$0.00	
Oct 30, 2015	M07	Debriefing Meeting	\$10,000.00	
Oct 30, 2015	D17	Annual Project Data	\$13,750.00	
Oct 30, 2015	D18	Annual Project Report	\$13,680.02	
Oct 31, 2015	N/A	Year 1 Close-out	No Fee Allowed	
TOTAL UP TO FIXED FEE AMOUNT:			\$159,930.02	